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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/721,988

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Daniel A. Linzmeier

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EXAMINER

PATEL, NITIN

ART UNIT

PAPER NUMBER

2673

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/721,988

Applicant(s)

LINZMEIER ET AL.

Examiner

Nitin Patel

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4, 8-13, 19-22, 24, 25, 27, 28, 30, 31 and 35-38 is/are rejected.
- 7) ☒ Claim(s) 5-7, 18, 26 and 32-34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. Claims 1,14,17,23,29 have been cancelled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4,8-13,19-22,24,25,27-28,30-31,35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hong (US 20020060662) in view of Arakawa (US 20020030660).

As per claims 2,21,30 Hong shows a display apparatus for optimizing a displayed image for use in an electronic device comprising (in fig.6 element 1000: a display for presenting a visual image (in fig.6 element 100); a processor (in fig.6 element 120 and see section 0051) for determining an intensity of a backlight for illuminating the display by adjusting a level of at least one of red, a green or blue pixel.

Hong does not teach a controller coupled to the display and the processor, wherein the controller optimizes the visual image corresponding to an intensity of the backlight.

Arakawa shows a controller (element 36 in fig.1 and see section 0030) connected to the display to optimize the display image. It would have been obvious to one of ordinary skill in the art, at the time of the invention was made to have combined the teaching of a controller as taught by Arakawa's with display circuitry of Hong's

because it would have controls the brightness of the backlight such that the brightness of the display image give maximum luminance of the backlight relevant to the brightness of the environment.

As per claims 2-4, Hong shows a pixel array, wherein adjusting a level of one of a red optimizes the visual image, a green and a blue setting for a pixel of the pixel array when image is optimizes (In section 0033, 0051).

As per claims 8-12,15,16,19,20,22,24,25,27,28,31,32,35-38Hong shows the pixel of the pixel array is adjusted in accordance with the intensity of the backlight at the pixel, communication device and personal digital assistant, visual image corresponding to the intensity of the backlight in a buffer memory (see section 0051,0068).

As per claim 13,Hong shows a method for optimizing an image in a display of an electronic device responsive to a change in an intensity of a backlight determining a constant value for scaling a pixel comprising: determining a factor for adjusting the image according to the intensity of the backlight; and adjusting the image using the factor. a constant value for scaling a brightness of a pixel in the display (in section 0053-0060).

As per claim 19, Hong shows determining the factor further comprises one of: determining the factor according to a table look up; and determining the factor according to a calculation using a value corresponding to the intensity of the backlight (section 0053,0055).

Allowable Subject Matter

3. Claims 5-7,18,26,32,33,34 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to teach or suggest the level of the one of the red, the green and the blue settings is adjusted inversely proportionally to the intensity of the backlight.

The prior art fails to teach or suggest wherein the level of the one of the red, green and blue settings is adjusted inversely proportionally to the intensity of the backlight until a one of the settings would exceed a limit value, wherein the one of the settings is set to a maximum value and an adjustment proportional to a change of the one of the settings is used for a remaining setting as claimed in claims 6,7,18,26,33.

The prior art fails to teach or suggest wherein the level of the one of the red, the green and the blue settings is adjusted inversely proportionally to the intensity of the backlight as claimed in claim 32.

Response to Arguments

4. Applicant's arguments with respect to claims 1-38 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin Patel whose telephone number is 571-272-7677. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin H. Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NP


December 26, 2005